

We claim:

1. A process for the fractional condensation of a hot gas
5 mixture which as well as acrylic acid contains at least one further condensable component in a column in the presence of at least one stabilizer, which comprises metering in at least a portion of the at least one stabilizer as a melt.
- 10 2. A process as claimed in claim 1, wherein the melt of at least one stabilizer having a melting point below 120°C is used as a solvent for at least one stabilizer having a melting point above 120°C.
- 15 3. Melt comprising
 - a) at least one phenolic compound,
 - b) phenothiazine and
 - 20 c) optionally at least one further compound which is effective as a stabilizer.
4. Melts as claimed in claim 3, wherein a) is selected from the group consisting of p-aminophenol, p-nitrosophenol,
25 2-tert-butylphenol, 4-tert-butylphenol, 2,4-di-tert-butylphenol, 2-methyl-4-tert-butylphenol, 4-tert-butyl-2,6-dimethylphenol, hydroquinone and hydroquinone monomethyl ether.
5. Melts as claimed in claim 3 which have the following
30 composition:
 - a): 60 - 99% by weight,
 - b): 1 - 20% by weight and
 - 35 c): 0 - 20% by weight,where the sum thereof is always equal to 100% by weight.
6. A process as claimed in any of claims 1 - 2, wherein a melt
40 as claimed in any of claims 3 to 5 is introduced into the upper column region and phenothiazine into the remaining column region.

7. A process as claimed in any of claims 1 - 2 or 6, wherein the hot gas mixture is cooled in an apparatus isolated from the column.
- 5 8. A process as claimed in any of claims 1 - 2 or 6 - 7, wherein at least one discharged stream is subjected to a thermal and/or catalytic treatment.
- 10 9. A process as claimed in any of claims 1 - 2 or 6 - 8 which is carried out in the presence of molecular oxygen.
- 10 10. The use of melts as claimed in any of claims 3 to 5 for stabilizing ethylenically unsaturated compounds in processes for preparing them.
- 15 11. A process for rectificatively separating substance mixtures comprising at least one polymerizable compound in the presence of a stabilizer composition comprising at least one phenolic stabilizer, which comprises metering the stabilizer composition into the rectification unit as a melt.
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